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**Orita**

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(54) **CONTROL DEVICE OF POWER TRANSMISSION DEVICE**

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CPC . ***F15B 13/02*** (2013.01); ***F16H 9/04*** (2013.01)

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See application file for complete search history.

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(57) **ABSTRACT**

By a control processing of the sliding-mode control using a switching function configured from a first variable component, which is a deviation between an observed value and a desired value of a secondary power imparted to a secondary element (**3**) from a primary element (**2**) via an elastic deformation member (**4**), and a second variable component which is a temporal change rate of the deviation, so as to sequentially determine a control input to control an actuator (**5**) to converge the first variable component to zero on a switching hyperplane. A gradient of the switching hyperplane is set such that a time constant corresponding to the gradient of the switching hyperplane is equal to or larger than a given specific time constant.

**7 Claims, 12 Drawing Sheets**